



San Joaquin Valley

AIR POLLUTION CONTROL DISTRICT



APR 11 2012

Gerardo C. Rios, Chief
Permits Office
Air Division
U.S. EPA - Region IX
75 Hawthorne St
San Francisco, CA 94105

Re: **Notice of Minor Title V Permit Modification**
District Facility # S-3461
Project # 1121185

Dear Mr. Rios:

Enclosed for you to review is an application for minor Title V permit modification for the facility identified above. Building Materials Manufacturing Corporation, dba GAF Corp is proposing a Title V minor permit modification to incorporate the recently issued Authorities to Construct (ATCs) S-3461-1-8, '-4-0, and '-5-0 into the Title V operating permit. The ATCs authorized the use of a new low foaming dispersant, biocide, defoamer, and polyacrylamide (PAA) viscosity modifier and a 6,000 gallon bulk polyacrylamide (PAA) tank and a 1,500 gallon dilute PAA tank

Enclosed is the engineering evaluation with the following attachments: proposed modified Title V permit, recently issued Authorities to Construct (ATCs) S-3461-1-8, '-4-0, and '-5-0, application, and previous Title V permit. Please submit your written comments on this project within the 45-day comment period that begins on the date you receive this letter.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Leonard Scandura at (661) 392-5500.

Sincerely,

David Warner
Director of Permit Services

Enclosures

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585



San Joaquin Valley

AIR POLLUTION CONTROL DISTRICT



APR 11 2012

Philip Halpin
Building Materials Manufacturing Corporation, dba GAF Corp
6505 S Zerker Road
Shafter, CA 93263

**Re: Notice of Minor Title V Permit Modification
District Facility # S-3461
Project # 1121185**

Dear Mr. Halpin:

Enclosed is the District's analysis of your application for minor Title V permit modification for the facility identified above. You proposed a Title V minor permit modification to incorporate recently issued Authorities to Construct (ATCs) S-3461-1-8, '-4-0, and '-5-0 into the Title V operating permit. The ATCs authorized the use of a new low foaming dispersant, biocide, defoamer, and polyacrylamide (PAA) viscosity modifier and a 6,000 gallon bulk polyacrylamide (PAA) tank and a 1,500 gallon dilute PAA tank

Enclosed is the engineering evaluation with the following attachments: proposed modified Title V permit, recently issued Authorities to Construct (ATCs) S-3461-1-8, '-4-0, and '-5-0, emission increases, application, and previous Title V permit. This project will be subject to a 45-day EPA commenting period prior to the District taking final action.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Leonard Scandura at (661) 392-5500.

Sincerely,

David Warner
Director of Permit Services

Enclosures

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Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585

TITLE V APPLICATION REVIEW

Minor Modification

Project #: S-1121185

Engineer: Richard Edgehill

Date: April 9, 2012

RWK 4-10-12

Facility Number: S-3461

Facility Name: Building Materials Manufacturing Corporation, dba GAF Corp

Mailing Address: 6505 S Zerker Road
Shafter, CA 93263

Contact Name: Phil Halpin

Phone: (661) 387-1110 # 109

Title: Plant Manager

Lead Engineer: Richard Karrs

I. PROPOSAL

Building Materials Manufacturing Corporation, dba GAF Corp is proposing a Title V minor permit modification to incorporate the recently issued Authorities to Construct (ATC) S-3461-1-8, '-4-0, and '-5-0 into their Title V operating permit. The ATCs were authorized by project 1114350. Project 1114350 authorized minor changes to the chemistry of the process including the use of a new low foaming dispersant, biocide, defoamer, and polyacrylamide (PAA) viscosity modifier and a 6,000 gallon bulk polyacrylamide (PAA, Nalco Nalclean® 7768) tank (ATC S-3461-4-0) and 1,500 gallon dilute PAA tank (ATC S-3461-5-0).

The Title V PTO serving as the base document is S-3461-1-4. As permit units S-3461-4 and '-5 are new, the base documents are the ATCs.

The purpose of this evaluation is to identify all applicable requirements, determine if the facility will comply with the applicable requirements and to provide the legal and factual basis for the proposed revisions.

II. FACILITY LOCATION

The equipment is located at 6505 Zerker Road, Shafter, CA.

III. EQUIPMENT DESCRIPTION

S-3461-1-9: FIBERGLASS MAT MANUFACTURING OPERATION INCLUDING MAT FORMING/IMPREGNATION SECTION, 60 MMBTU/HR NATURAL GAS FIRED DRYER, 8 MMBTU/HR NATURAL GAS FIRED OVEN EXHAUSTING TO 7.5 MMBTU/HR NATURAL GAS FIRED REGENERATIVE THERMAL OXIDIZER, TRIMMING, WINDING, AND BALING UNIT, AND THE FOLLOWING PERMIT EXEMPT EQUIPMENT: COOLING WATER TANK, HOT WATER TANK, DEFECT DYE TANK, <250 GALLON GASOLINE STORAGE TANK, AND PLANT AIR COMPRESSOR

S-3461-4-1: 6100 GALLON FLOCCULANT

S-3461-5-1: 1575 GALLON DILUTE FLOCCULANT

IV. SCOPE OF EPA AND PUBLIC REVIEW

This change to a Title V permit is considered to be a minor modification and, as such, requires no public review.

V. APPLICABLE REQUIREMENTS

District Rule 2520, Federally Mandated Operating Permits (Adopted June 21, 2001)

VI. DESCRIPTION OF PROPOSED MODIFICATIONS

The following changes to Title V PTO S-3461-1-4 will be made and will appear in the proposed Title V PTO S-3461-1-9. The Condition # matches/changes are included in the table below.

Draft PTO S-3461-1-9	Current PTO S-3461-1-4	Justification
	1-5	dormant emissions unit DEU) conditions on current PTO not included on draft PTO, note that source testing requirements before recommencing operation have been satisfied
1-15, 17-19,	6-20, 21-23	
16 (new condition limiting use of proposed materials)		Monthly average daily throughput of biocides and dispersant shall not exceed 40 gal/day and 80 gal/day, respectively. [District Rule 2201] Y
20	24	24. Total emissions from the forming/impregnation section, dryer, oven and thermal oxidizer shall not exceed any of the following: PM10 - 0.61 lb/hr (14.7 lb/day), SOx (as SO2) - 0.046 lb/hr (1.1 lb/day), NOx (as NO2) - 7.61 lb/hr (182.6 lb/day), VOC 2.34 <u>2.29</u> lb/hr (56.2 lb/day), or CO - 4.54 lb/hr (108.9 lb/day). [District Rule 2201] Y - Revised with new PE2
21	25	25. Total VOC emissions from the forming/impregnation section shall not exceed 23.5 <u>22.5</u> lb/day. [District Rule 2201] Y
22	26	
23	27	Upon recommencing operation total VOC emissions from the storage tanks, forming/impregnation section, dryer, oven, and thermal oxidizer covered by this permit, and the emergency IC engine covered by permit unit S-3461-4 2, and storage tanks S-3461-4 and -5 shall not exceed 49,960 19,787 lb per year. Compliance with this limit will be shown each year in the annual emissions inventory. [District Rule 2201] Y
24-44, 47-49, 45 (new)	28-48, 50-52	45. Permittee shall maintain records of monthly average daily throughputs of biocides and dispersant. [District Rule 2201] Y

Proposed PTOs '-4-1 and '-5-1

These are new emissions units. The following ATC condition will not be included on the PTOs (as it has already been satisfied):

1. {1829} The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Y

VII. COMPLIANCE

In accordance with Rule 2520, 3.20, these modifications:

1. Do not violate requirements of any applicable federally enforceable local or federal requirement;
2. Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions;
3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include;
 - a. A federally enforceable emission cap assumed to avoid classification as a modification under any provisions of Title I of the Federal Clean Air Act; and
 - b. An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act; and
5. Are not Title I modifications as defined in District Rule 2520 or modifications as defined in section 111 or 112 of the Federal Clean Air Act; and
6. Do not seek to consolidate overlapping applicable requirements.

In accordance with Rule 2520, the application meets the procedural requirements of section 11.4 by including:

1. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
2. The source's suggested draft permit; and

3. Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used.

VIII. ATTACHMENTS

- A. Proposed Title V PTOs S-3461-1-9, '-4-1, 'and '-5-1
- B. Authorities to Construct S-3461-1-8, '-4-0, and '-5-0
- C. Permit Application
- D. Previous Title V (draft) PTO S-3461-1-4-1

ATTACHMENT A

Proposed Title V PTOs S-3461-1-9, '-4-1,
'and '-5-1

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3461-1-9

EXPIRATION DATE: 06/30/2015

SECTION: 15 **TOWNSHIP:** 28S **RANGE:** 26E

EQUIPMENT DESCRIPTION:

FIBERGLASS MAT MANUFACTURING OPERATION INCLUDING MAT FORMING/IMPREGNATION SECTION, 60 MMBTU/HR NATURAL GAS FIRED DRYER, 8 MMBTU/HR NATURAL GAS FIRED OVEN EXHAUSTING TO 7.5 MMBTU/HR NATURAL GAS FIRED REGENERATIVE THERMAL OXIDIZER, TRIMMING, WINDING, AND BALING UNIT, AND THE FOLLOWING PERMIT EXEMPT EQUIPMENT: COOLING WATER TANK, HOT WATER TANK, DEFECT DYE TANK, <250 GALLON GASOLINE STORAGE TANK, AND PLANT AIR COMPRESSOR

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Mat forming/impregnation section shall include: mat forming/impregnation unit, vacuum pump, two pulper agitators, 100 HP transfer roll exhaust fan, 100 HP holding roll exhaust fan, and various liquid transfer pumps. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Dryer and oven shall include: 150 HP drive motor, four 150 HP and two 75 HP circulation fans, 20 hp transfer fan, and 125 HP exhaust fan. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Thermal oxidizer shall include a 300 HP fan motor. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Trimmer/winding/baling operation shall include Kampf GmbH trimmer/winder, two trim fans, rewinder, two cyclones or two expansion chambers, and two scrap balers. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Operation shall include 19 storage vessels: two 6,500 gal. pulpers, two 31,700 gal. machine chests, 5,500 gal. couch chest, 71,000 gal. white water tank, 900 gal. white water sump, two 250,000 gal. deaeration tanks, 20,000 gal. latex tank, three 20,300 gal. resin tanks, 4,080 gal. surge/mix tank, 20,700 gal. extraction tank, 150,000 gal. Saveall tank, two 121 gal. zinc sulfate tanks, and 4,400 gal. vacuum seal tank. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Thermal oxidizer shall be equipped with a non-resettable natural gas fuel flow meter. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Thermal oxidizer shall be equipped with an operational temperature indicator reading and continuously recording the combustion chamber temperature. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
9. Thermal oxidizer combustion chamber temperature shall be maintained at or above 1,500 degrees F. whenever mat is in the dryer or oven. [District 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
10. All dryer and oven exhaust gases shall be vent only to the thermal oxidizer except during startup when no mat is being processed in the dryer or curing oven. [District Rule 2201] Federally Enforceable Through Title V Permit
11. All burners shall be fueled with natural gas consisting principally of methane with a sulfur content less than 1.0 grains per 100 scf and no more than 5% by weight hydrocarbons heavier than butane. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

12. VOC reduction across thermal oxidizer shall be no less than 98%. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
13. Annual natural gas heat input to thermal oxidizer shall not exceed 59.15 billion BTU's. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The urea-formaldehyde resin shall not have a formaldehyde content in excess of 0.25% by weight or a methanol content in excess of 0.45% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Urea-formaldehyde usage shall not exceed 21,000 gallons/day. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Monthly average daily throughput of biocides and dispersant shall not exceed 40 gal/day and 80 gal/day, respectively. [District Rule 2201] Federally Enforceable Through Title V Permit
17. No more than 247 tons per day of fiberglass mat shall be manufactured. [District Rule 2201] Federally Enforceable Through Title V Permit
18. PM10 emissions from the forming/impregnation section transfer roll fan exhaust, the holding roll fan exhaust, and the vacuum pump exhaust shall not exceed 0.083 lb/hr each. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Combined emissions from the natural gas-fired dryer and oven shall not exceed any of the following limits: 4.3 ppmvd NOx @ 19% O2 (equivalent to 0.04925 lb-NOx/MMBtu) and 42 ppmvd CO @ 19% O2 (equivalent to 0.29278 lb-CO/MMBtu). If measured O2 concentration is greater than 19%, the corrected NOx or CO concentration is equal to the measured NOx or CO concentration. [District Rules 2201 and 4309] Federally Enforceable Through Title V Permit
20. Total emissions from the forming/impregnation section, dryer, oven and thermal oxidizer shall not exceed any of the following: PM10 - 0.61 lb/hr (14.7 lb/day), SOx (as SO2) - 0.046 lb/hr (1.1 lb/day), NOx (as NO2) - 7.61 lb/hr (182.6 lb/day), VOC 2.29 lb/hr (54.9 lb/day), or CO - 4.54 lb/hr (108.9 lb/day). [District Rule 2201] Federally Enforceable Through Title V Permit
21. Total VOC emissions from the forming/impregnation section shall not exceed 22.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
22. VOC emissions from each storage vessel shall not exceed 0.5 pounds per day. [District Rule 2201] Federally Enforceable Through Title V Permit
23. VOC emissions from the storage tanks, forming/impregnation section, dryer, oven, and thermal oxidizer covered by this permit, emergency IC engine S-3461-2, and storage tanks S-3461-4 and '-5 shall not exceed 19,787 lb per year. Compliance with this limit will be shown each year in the annual emissions inventory. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Permittee shall monitor and record the stack concentration of NOx, CO, and O2 from the natural gas-fired dryer and oven combined exhaust upstream of the thermal oxidizer at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4309] Federally Enforceable Through Title V Permit
25. If either the NOx or CO concentrations corrected to 19% O2 (or no correction if measured above 19% O2), as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4309] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

26. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4309] Federally Enforceable Through Title V Permit
27. Permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 19% O₂ (or no correction if measured above 19% O₂), (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range [District Rule 4309] Federally Enforceable Through Title V Permit
28. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4309. [District Rule 4309] Federally Enforceable Through Title V Permit
29. Sampling provisions for source testing shall be installed in accordance with Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
30. Source testing shall be conducted using the methods and procedures approved by the District, the District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
31. Source testing to demonstrate compliance with the VOC reduction efficiency across thermal oxidizer shall be conducted at least once every 12 months. [District Rule 1081 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
32. Source testing to measure NO_x and CO emissions from the combined dryer and oven exhaust shall be conducted at least once every 24 months. [District Rules 2201 and 4309] Federally Enforceable Through Title V Permit
33. All test results for NO_x and CO emissions from the combined dryer and oven exhaust shall be reported in ppmv @ 19% O₂ (or no correction if measured above 19% O₂), corrected to dry stack conditions. [District Rule 4309] Federally Enforceable Through Title V Permit
34. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 4309] Federally Enforceable Through Title V Permit
35. NO_x emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis. [District Rule 4309] Federally Enforceable Through Title V Permit
36. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4309] Federally Enforceable Through Title V Permit
37. Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4309] Federally Enforceable Through Title V Permit
38. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rules 1081 and 4309] Federally Enforceable Through Title V Permit
39. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rules 1081 and 4309] Federally Enforceable Through Title V Permit
40. The following test methods shall be used for measuring the thermal oxidizer VOC reductions efficiency: EPA method 316 for measuring VOCs (as formaldehyde) at the inlet and outlet, and EPA method 2 for measuring the flow rates. [District Rule 1081 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

41. If the transfer roll fan exhaust, holding roll fan exhaust, or vacuum pump exhaust of the forming and impregnation operation exhibits visible emissions equal or greater than 5% opacity for a period or periods aggregating more than 3 minutes in any one hour, compliance testing shall be conducted on the unit(s) exhibiting visible emissions by District-witnessed sample collection within 60 days of District determination. [District Rule 2201] Federally Enforceable Through Title V Permit
42. Permittee shall maintain records of monthly and annual fuel consumption for the thermal oxidizer and shall make such records readily available for District inspection upon request for a period of five years. [District Rule 1070] Federally Enforceable Through Title V Permit
43. Permittee shall maintain records of the VOC and methanol contents of the urea-formaldehyde resin and daily mat production weight and shall make such records readily available for District inspection upon request for a period of five years. [District Rule 1070] Federally Enforceable Through Title V Permit
44. Permittee shall maintain annual records of VOC emissions from this operation and from the entire facility and shall make such records readily available for District inspection upon request for a period of five years. [District Rule 1070] Federally Enforceable Through Title V Permit
45. Permittee shall maintain records of monthly average daily throughputs of biocides and dispersant. [District Rule 2201] Federally Enforceable Through Title V Permit
46. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4309] Federally Enforceable Through Title V Permit
47. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
48. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit
49. If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3461-4-1

EXPIRATION DATE: 06/30/2015

EQUIPMENT DESCRIPTION:
6100 GALLON FLOCCULANT TANK:

PERMIT UNIT REQUIREMENTS

1. Tank shall only store flocculant. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
3. Monthly average daily throughput shall not exceed 150 gallons/day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Permittee shall maintain monthly records of monthly average daily throughput. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
5. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3461-5-1

EXPIRATION DATE: 06/30/2015

EQUIPMENT DESCRIPTION:
1575 GALLON DILUTE FLOCCULANT TANK:

PERMIT UNIT REQUIREMENTS

1. Tank shall only store flocculant and water. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
3. Monthly average daily throughput of flocculant shall not exceed 150 gallons/day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Permittee shall maintain monthly records of monthly average daily throughput of flocculent. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
5. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

ATTACHMENT B

Authorities to Construct S-3461-1-8, '-4-0,
and '-5-0



AUTHORITY TO CONSTRUCT

PERMIT NO: S-3461-1-8

ISSUANCE DATE: 02/27/2012

LEGAL OWNER OR OPERATOR: BUILDING MATERIALS MFG. CORP. (DBA GAF)

MAILING ADDRESS: 6505 ZERKER RD
SHAFTER, CA 93263

LOCATION: 6505 ZERKER RD
SHAFTER, CA 93263

SECTION: 15 **TOWNSHIP:** 28S **RANGE:** 26E

EQUIPMENT DESCRIPTION:

MODIFICATION OF FIBERGLASS MAT MANUFACTURING OPERATION INCLUDING MAT FORMING/IMPREGNATION SECTION, 60 MMBTU/HR NATURAL GAS FIRED DRYER, 8 MMBTU/HR NATURAL GAS FIRED OVEN EXHAUSTING TO 7.5 MMBTU/HR NATURAL GAS FIRED REGENERATIVE THERMAL OXIDIZER, TRIMMING, WINDING, AND BALING UNIT, AND THE FOLLOWING PERMIT EXEMPT EQUIPMENT: COOLING WATER TANK, HOT WATER TANK, DEFECT DYE TANK, <250 GALLON GASOLINE STORAGE TANK, PLANT AIR COMPRESSOR, AND <2 MMBTU/HR NATURAL GAS-FIRED HOT WATER HEATER: REPLACE WHITEWATER ADDITIVE BARLOX 16S WITH FLOCCULANT STORED IN TANKS S-3461-4 AND -5, BIOCIDES AND DISPERSANT, REPLACE NATURAL GAS FIRED HOT WATER HEATER WITH S-3461-PEER-1-0

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of startup. [District Rule 4309] Federally Enforceable Through Title V Permit
3. A source test to demonstrate the VOC reduction efficiency across the thermal oxidizer shall be performed within 60 days of startup. [District Rule 1081 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

DAVID WARNER, Director of Permit Services

S-3461-1-8 : Apr 9 2012 3:34PM -- EDGEHILR : Joint Inspection NOT Required

5. Mat forming/impregnation section shall include: mat forming/impregnation unit, vacuum pump, two pulper agitators, 100 HP transfer roll exhaust fan, 100 HP holding roll exhaust fan, and various liquid transfer pumps. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Dryer and oven shall include: 150 HP drive motor, four 150 HP and two 75 HP circulation fans, 20 hp transfer fan, and 125 HP exhaust fan. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Thermal oxidizer shall include a 300 HP fan motor. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Trimmer/winding/baling operation shall include Kampf GmbH trimmer/winder, two trim fans, rewinder, two cyclones or two expansion chambers, and two scrap balers. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Operation shall include 19 storage vessels: two 6,500 gal. pulpers, two 31,700 gal. machine chests, 5,500 gal. couch chest, 71,000 gal. white water tank, 900 gal. white water sump, two 250,000 gal. deaeration tanks, 20,000 gal. latex tank, three 20,300 gal. resin tanks, 4,080 gal. surge/mix tank, 20,700 gal. extraction tank, 150,000 gal. Saveall tank, two 121 gal. zinc sulfate tanks, and 4,400 gal. vacuum seal tank. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Thermal oxidizer shall be equipped with a non-resettable natural gas fuel flow meter. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Thermal oxidizer shall be equipped with an operational temperature indicator reading and continuously recording the combustion chamber temperature. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
12. Thermal oxidizer combustion chamber temperature shall be maintained at or above 1,500 degrees F. whenever mat is in the dryer or oven. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
13. All dryer and oven exhaust gases shall be vent only to the thermal oxidizer except during startup when no mat is being processed in the dryer or curing oven. [District Rule 2201] Federally Enforceable Through Title V Permit
14. All burners shall be fueled with natural gas consisting principally of methane with a sulfur content less than 1.0 grains per 100 scf and no more than 5% by weight hydrocarbons heavier than butane. [District Rule 2201] Federally Enforceable Through Title V Permit
15. VOC reduction across thermal oxidizer shall be no less than 98%. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
16. Annual natural gas heat input to thermal oxidizer shall not exceed 59.15 billion BTU's. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The urea-formaldehyde resin shall not have a formaldehyde content in excess of 0.25% by weight or a methanol content in excess of 0.45% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Urea-formaldehyde usage shall not exceed 21,000 gallons/day. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Monthly average daily throughput of biocides and dispersant shall not exceed 40 gal/day and 80 gal/day, respectively. [District Rule 2201] Federally Enforceable Through Title V Permit
20. No more than 247 tons per day of fiberglass mat shall be manufactured. [District Rule 2201] Federally Enforceable Through Title V Permit
21. PM10 emissions from the forming/impregnation section transfer roll fan exhaust, the holding roll fan exhaust, and the vacuum pump exhaust shall not exceed 0.083 lb/hr each. [District Rule 2201] Federally Enforceable Through Title V Permit
22. Combined emissions from the natural gas-fired dryer and oven shall not exceed any of the following limits: 4.3 ppmvd NO_x @ 19% O₂ (equivalent to 0.04925 lb-NO_x/MMBtu) and 42 ppmvd CO @ 19% O₂ (equivalent to 0.29278 lb-CO/MMBtu). If measured O₂ concentration is greater than 19%, the corrected NO_x or CO concentration is equal to the measured NO_x or CO concentration. [District Rules 2201 and 4309] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

23. Total emissions from the forming/impregnation section, dryer, oven and thermal oxidizer shall not exceed any of the following: PM10 - 0.61 lb/hr (14.7 lb/day), SOx (as SO2) - 0.046 lb/hr (1.1 lb/day), NOx (as NO2) - 7.61 lb/hr (182.6 lb/day), VOC 2.29 lb/hr (54.9 lb/day), or CO - 4.54 lb/hr (108.9 lb/day). [District Rule 2201] Federally Enforceable Through Title V Permit
24. Total VOC emissions from the forming/impregnation section shall not exceed 22.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
25. VOC emissions from each storage vessel shall not exceed 0.5 pounds per day. [District Rule 2201] Federally Enforceable Through Title V Permit
26. VOC emissions from the storage tanks, forming/impregnation section, dryer, oven, and thermal oxidizer covered by this permit and the emergency IC engine covered by permit unit S-3461-1 shall not exceed 19,787 lb per year. Compliance with this limit will be shown each year in the annual emissions inventory. [District Rule 2201] Federally Enforceable Through Title V Permit
27. Permittee shall monitor and record the stack concentration of NOx, CO, and O2 from the natural gas-fired dryer and oven combined exhaust upstream of the thermal oxidizer at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4309] Federally Enforceable Through Title V Permit
28. If either the NOx or CO concentrations corrected to 19% O2 (or no correction if measured above 19% O2), as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4309] Federally Enforceable Through Title V Permit
29. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4309] Federally Enforceable Through Title V Permit
30. Permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 19% O2 (or no correction if measured above 19% O2), (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range [District Rule 4309] Federally Enforceable Through Title V Permit
31. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4309. [District Rule 4309] Federally Enforceable Through Title V Permit
32. Sampling provisions for source testing shall be installed in accordance with Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
33. Source testing shall be conducted using the methods and procedures approved by the District, the District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

34. Source testing to demonstrate compliance with the VOC reduction efficiency across thermal oxidizer shall be conducted at least once every 12 months. [District Rule 1081 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
35. Source testing to measure NO_x and CO emissions from the combined dryer and oven exhaust shall be conducted at least once every 24 months. [District Rules 2201 and 4309] Federally Enforceable Through Title V Permit
36. All test results for NO_x and CO emissions from the combined dryer and oven exhaust shall be reported in ppmv @ 19% O₂ (or no correction if measured above 19% O₂), corrected to dry stack conditions. [District Rule 4309] Federally Enforceable Through Title V Permit
37. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 4309] Federally Enforceable Through Title V Permit
38. NO_x emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis. [District Rule 4309] Federally Enforceable Through Title V Permit
39. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4309] Federally Enforceable Through Title V Permit
40. Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4309] Federally Enforceable Through Title V Permit
41. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rules 1081 and 4309] Federally Enforceable Through Title V Permit
42. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rules 1081 and 4309] Federally Enforceable Through Title V Permit
43. The following test methods shall be used for measuring the thermal oxidizer VOC reductions efficiency: EPA method 316 for measuring VOCs (as formaldehyde) at the inlet and outlet, and EPA method 2 for measuring the flow rates. [District Rule 1081 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
44. If the transfer roll fan exhaust, holding roll fan exhaust, or vacuum pump exhaust of the forming and impregnation operation exhibits visible emissions equal or greater than 5% opacity for a period or periods aggregating more than 3 minutes in any one hour, compliance testing shall be conducted on the unit(s) exhibiting visible emissions by District-witnessed sample collection within 60 days of District determination. [District Rule 2201] Federally Enforceable Through Title V Permit
45. Permittee shall maintain records of monthly and annual fuel consumption for the thermal oxidizer and shall make such records readily available for District inspection upon request for a period of five years. [District Rule 1070] Federally Enforceable Through Title V Permit
46. Permittee shall maintain records of the VOC and methanol contents of the urea-formaldehyde resin and daily mat production weight and shall make such records readily available for District inspection upon request for a period of five years. [District Rule 1070] Federally Enforceable Through Title V Permit
47. Permittee shall maintain annual records of VOC emissions from this operation and from the entire facility and shall make such records readily available for District inspection upon request for a period of five years. [District Rule 1070] Federally Enforceable Through Title V Permit
48. Permittee shall maintain records of monthly average daily throughputs of biocides and dispersant. [District Rule 2201] Federally Enforceable Through Title V Permit
49. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4309] Federally Enforceable Through Title V Permit
50. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
51. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

52. If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit



AUTHORITY TO CONSTRUCT

PERMIT NO: S-3461-4-0

ISSUANCE DATE: 02/27/2012

LEGAL OWNER OR OPERATOR: BUILDING MATERIALS MFG. CORP. (DBA GAF)

MAILING ADDRESS: 6505 ZERKER RD
SHAFTER, CA 93263

LOCATION: 6505 ZERKER RD
SHAFTER, CA 93263

EQUIPMENT DESCRIPTION:
6100 GALLON FLOCCULANT TANK

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Tank shall only store flocculant. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
4. Monthly average daily throughput shall not exceed 150 gallons/day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall maintain monthly records of monthly average daily throughput. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
6. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

DAVID WARNER, Director of Permit Services

S-3461-4-0 : Apr 9 2012 3:34PM -- EDGEHILR : Joint Inspection NOT Required



AUTHORITY TO CONSTRUCT

PERMIT NO: S-3461-5-0

ISSUANCE DATE: 02/27/2012

LEGAL OWNER OR OPERATOR: BUILDING MATERIALS MFG. CORP. (DBA GAF)

MAILING ADDRESS: 6505 ZERKER RD
SHAFTER, CA 93263

LOCATION: 6505 ZERKER RD
SHAFTER, CA 93263

EQUIPMENT DESCRIPTION:
1575 GALLON DILUTE FLOCCULANT TANK

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Tank shall only store flocculant and water. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
4. Monthly average daily throughput of flocculant shall not exceed 150 gallons/day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall maintain monthly records of monthly average daily throughput of flocculent. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
6. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Sayed Sadredin, Executive Director / APCO

ATTACHMENT C

Permit Application

5-3461-1-9, 4-1, 5-1

San Joaquin Valley Air Pollution Control District

www.valleyair.org

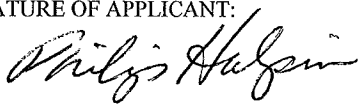
RECEIVED

APR -5 2012

SJVAPCD
Southern Region

Permit Application For:

[] ADMINISTRATIVE AMENDMENT [X] MINOR MODIFICATION [] SIGNIFICANT MODIFICATION

1. PERMIT TO BE ISSUED TO: Building Materials Manufacturing Corporation, dba GAF Corp.	
2. MAILING ADDRESS: STREET/P.O. BOX: 6505 S Zerker Road CITY: Shafter STATE: California 9-DIGIT ZIP CODE: 93263-9614	
3. LOCATION WHERE THE EQUIPMENT WILL BE OPERATED: STREET: 6505 Zerker Road CITY: Shafter 1/4 SECTION 15 TOWNSHIP 28S RANGE 26E	INSTALLATION DATE:
4. GENERAL NATURE OF BUSINESS: Fiberglass mat manufacturing	
5. DESCRIPTION OF EQUIPMENT OR MODIFICATION FOR WHICH APPLICATION IS MADE (include Permit #'s if known, and use additional sheets if necessary) S-3461-1-8: Modification of fiberglass mat manufacturing operation. Attached for reference. S-3461-4-0: ATC: 6,100 gallon tank. Attached for reference. S-3461-5-0: ATC: 1,575 gallon tank. Attached for reference.	
6. TYPE OR PRINT NAME OF APPLICANT: Phil Halpin	TITLE OF APPLICANT: Plant Manager
7. SIGNATURE OF APPLICANT:  DATE: 3/30/2012	PHONE: (661) 387 1110, ext 109 FAX: (661) 387 1115 EMAIL: phalpin@gaf.com

For APCD Use Only: NO \$

DATE STAMP	FILING FEE RECEIVED: \$ CHECK#: DATE PAID: PROJECT NO: S-1121185 FACILITY ID: S-3461
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Central Regional Office • 1990 E. Gettysburg Avenue • Fresno, CA 93726-0244 • (559) 230-5900 • FAX (559) 230-

6061

Revised: January, 2009

TVFORM-008

Title V - Minor Mod

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APR -5 2012
SJVAPCD
Southern Region

San Joaquin Valley
Unified Air Pollution Control District

TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

☐ SIGNIFICANT PERMIT MODIFICATION
☒ MINOR PERMIT MODIFICATION

☐ ADMINISTRATIVE
AMENDMENT

COMPANY NAME: Building Materials Manufacturing Corporation, dba GAF Corp.	FACILITY ID: -
1. Type of Organization: <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input type="checkbox"/> Government <input type="checkbox"/> Partnership <input type="checkbox"/> Utility	
2. Owner's Name:	
3. Agent to the Owner:	

II. COMPLIANCE CERTIFICATION (Read each statement carefully and initial all circles for confirmation):

- ☒ Based on information and belief formed after reasonable inquiry, the equipment identified in this application will continue to comply with the applicable federal requirement(s).
- ☒ Based on information and belief formed after reasonable inquiry, the equipment identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis.
- ☒ Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.
- ☒ Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.

I declare, under penalty of perjury under the laws of the state of California, that the forgoing is correct and true:

Philip Halpin
Signature of Responsible Official

3/30/2012
Date

Philip Halpin
Name of Responsible Official (please print)

Plant Manager
Title of Responsible Official (please print)

ATTACHMENT D

Previous Title V (draft) PTO S-3461-1-4

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3461-1-4

EXPIRATION DATE: 06/30/2015

SECTION: 15 **TOWNSHIP:** 28S **RANGE:** 26E

EQUIPMENT DESCRIPTION:

FIBERGLASS MAT MANUFACTURING OPERATION INCLUDING MAT FORMING/IMPREGNATION SECTION, 60 MMBTU/HR NATURAL GAS FIRED DRYER, 8 MMBTU/HR NATURAL GAS FIRED OVEN EXHAUSTING TO 7.5 MMBTU/HR NATURAL GAS FIRED REGENERATIVE THERMAL OXIDIZER, TRIMMING, WINDING, AND BALING UNIT, AND THE FOLLOWING PERMIT EXEMPT EQUIPMENT: COOLING WATER TANK, HOT WATER TANK, DEFECT DYE TANK, <250 GALLON GASOLINE STORAGE TANK, PLANT AIR COMPRESSOR, AND <2 MMBTU/HR NATURAL GAS-FIRED HOT WATER HEATER (COMPLIANT DORMANT EMISSIONS UNIT)

PERMIT UNIT REQUIREMENTS

1. The permittee shall notify the District at least seven calendar days prior to the designation of this permit unit as a dormant emissions unit or an active emissions unit. [District Rule 1070] Federally Enforceable Through Title V Permit
2. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4309] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4309] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4309] Federally Enforceable Through Title V Permit
5. A source test to demonstrate the VOC reduction efficiency across the thermal oxidizer shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 1081 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
6. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
7. Mat forming/impregnation section shall include: mat forming/impregnation unit, vacuum pump, two pulper agitators, 100 HP transfer roll exhaust fan, 100 HP holding roll exhaust fan, and various liquid transfer pumps. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Dryer and oven shall include: 150 HP drive motor, four 150 HP and two 75 HP circulation fans, 20 hp transfer fan, and 125 HP exhaust fan. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Thermal oxidizer shall include a 300 HP fan motor. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Trimmer/winding/baling operation shall include Kampf GmbH trimmer/winder, two trim fans, rewinder, two cyclones or two expansion chambers, and two scrap balers. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: BUILDING MATERIALS MFG. CORP. (DBA GAF)

Location: 6505 ZERKER RD, SHAFTER, CA 93263

S-3461-1-4 : Apr 9 2012 12:58PM - EDGEHILL

11. Operation shall include 19 storage vessels: two 6,500 gal. pulpers, two 31,700 gal. machine chests, 5,500 gal. couch chest, 71,000 gal. white water tank, 900 gal. white water sump, two 250,000 gal. deaeration tanks, 20,000 gal. latex tank, three 20,300 gal. resin tanks, 4,080 gal. surge/mix tank, 20,700 gal. extraction tank, 150,000 gal. Saveall tank, two 121 gal. zinc sulfate tanks, and 4,400 gal. vacuum seal tank. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Thermal oxidizer shall be equipped with a non-resettable natural gas fuel flow meter. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Upon recommencing operation thermal oxidizer shall be equipped with an operational temperature indicator reading and continuously recording the combustion chamber temperature. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
14. Thermal oxidizer combustion chamber temperature shall be maintained at or above 1,500 degrees F. whenever mat is in the dryer or oven. [District 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
15. All dryer and oven exhaust gases shall be vent only to the thermal oxidizer except during startup when no mat is being processed in the dryer or curing oven. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All burners shall be fueled with natural gas consisting principally of methane with a sulfur content less than 1.0 grains per 100 scf and no more than 5% by weight hydrocarbons heavier than butane. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Upon recommencing operation VOC reduction across thermal oxidizer shall be no less than 98%. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
18. Annual natural gas heat input to thermal oxidizer shall not exceed 59.15 billion BTU's. [District Rule 2201] Federally Enforceable Through Title V Permit
19. The urea-formaldehyde resin shall not have a formaldehyde content in excess of 0.25% by weight or a methanol content in excess of 0.45% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Urea-formaldehyde usage shall not exceed 21,000 gallons/day. [District Rule 2201] Federally Enforceable Through Title V Permit
21. No more than 247 tons per day of fiberglass mat shall be manufactured. [District Rule 2201] Federally Enforceable Through Title V Permit
22. PM10 emissions from the forming/impregnation section transfer roll fan exhaust, the holding roll fan exhaust, and the vacuum pump exhaust shall not exceed 0.083 lb/hr each. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Combined emissions from the natural gas-fired dryer and oven shall not exceed any of the following limits: 4.3 ppmvd NOx @ 19% O2 (equivalent to 0.04925 lb-NOx/MMBtu) and 42 ppmvd CO @ 19% O2 (equivalent to 0.29278 lb-CO/MMBtu). If measured O2 concentration is greater than 19%, the corrected NOx or CO concentration is equal to the measured NOx or CO concentration. [District Rules 2201 and 4309] Federally Enforceable Through Title V Permit
24. Total emissions from the forming/impregnation section, dryer, oven and thermal oxidizer shall not exceed any of the following: PM10 - 0.61 lb/hr (14.7 lb/day), SOx (as SO2) - 0.046 lb/hr (1.1 lb/day), NOx (as NO2) - 7.61 lb/hr (182.6 lb/day), VOC 2.34 lb/hr (56.2 lb/day), or CO - 4.54 lb/hr (108.9 lb/day). [District Rule 2201] Federally Enforceable Through Title V Permit
25. Total VOC emissions from the forming/impregnation section shall not exceed 23.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
26. VOC emissions from each storage vessel shall not exceed 0.5 pounds per day. [District Rule 2201] Federally Enforceable Through Title V Permit
27. Upon recommencing operation total VOC emissions from the storage tanks, forming/impregnation section, dryer, oven, and thermal oxidizer covered by this permit and the emergency IC engine covered by permit unit S-3461-1 shall not exceed 19,960 lb per year. Compliance with this limit will be shown each year in the annual emissions inventory. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

28. Upon recommencing operation the permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ from the natural gas-fired dryer and oven combined exhaust upstream of the thermal oxidizer at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4309] Federally Enforceable Through Title V Permit
29. If either the NO_x or CO concentrations corrected to 19% O₂ (or no correction if measured above 19% O₂), as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4309] Federally Enforceable Through Title V Permit
30. Upon recommencing operation all alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4309] Federally Enforceable Through Title V Permit
31. Upon recommencing operation the permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 19% O₂ (or no correction if measured above 19% O₂), (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range [District Rule 4309] Federally Enforceable Through Title V Permit
32. Upon recommencing operation all emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4309. [District Rule 4309] Federally Enforceable Through Title V Permit
33. Sampling provisions for source testing shall be installed in accordance with Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
34. Upon recommencing operation source testing shall be conducted using the methods and procedures approved by the District, the District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
35. Upon recommencing operation source testing to demonstrate compliance with the VOC reduction efficiency across thermal oxidizer shall be conducted at least once every 12 months. [District Rule 1081 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
36. Upon recommencing operation source testing to measure NO_x and CO emissions from the combined dryer and oven exhaust shall be conducted at least once every 24 months. [District Rules 2201 and 4309] Federally Enforceable Through Title V Permit
37. All test results for NO_x and CO emissions from the combined dryer and oven exhaust shall be reported in ppmv @ 19% O₂ (or no correction if measured above 19% O₂), corrected to dry stack conditions. [District Rule 4309] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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38. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 4309] Federally Enforceable Through Title V Permit
39. NO_x emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis. [District Rule 4309] Federally Enforceable Through Title V Permit
40. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4309] Federally Enforceable Through Title V Permit
41. Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4309] Federally Enforceable Through Title V Permit
42. Upon recommencing operation source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rules 1081 and 4309] Federally Enforceable Through Title V Permit
43. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rules 1081 and 4309] Federally Enforceable Through Title V Permit
44. Upon recommencing operation the following test methods shall be used for measuring the thermal oxidizer VOC reductions efficiency: EPA method 316 for measuring VOCs (as formaldehyde) at the inlet and outlet, and EPA method 2 for measuring the flow rates. [District Rule 1081 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
45. If the transfer roll fan exhaust, holding roll fan exhaust, or vacuum pump exhaust of the forming and impregnation operation exhibits visible emissions equal or greater than 5% opacity for a period or periods aggregating more than 3 minutes in any one hour, compliance testing shall be conducted on the unit(s) exhibiting visible emissions by District-witnessed sample collection within 60 days of District determination. [District Rule 2201] Federally Enforceable Through Title V Permit
46. Upon recommencing operation permittee shall maintain records of monthly and annual fuel consumption for the thermal oxidizer and shall make such records readily available for District inspection upon request for a period of five years. [District Rule 1070] Federally Enforceable Through Title V Permit
47. Upon recommencing operation permittee shall maintain records of the VOC and methanol contents of the urea-formaldehyde resin and daily mat production weight and shall make such records readily available for District inspection upon request for a period of five years. [District Rule 1070] Federally Enforceable Through Title V Permit
48. Upon recommencing operation permittee shall maintain annual records of VOC emissions from this operation and from the entire facility and shall make such records readily available for District inspection upon request for a period of five years. [District Rule 1070] Federally Enforceable Through Title V Permit
49. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4309] Federally Enforceable Through Title V Permit
50. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit
51. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit
52. If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit

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